CA1 IST40 -A27



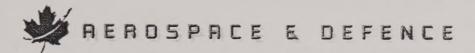
Aerospace and Defence-Related Industries

Statistical Survey Report 1996



I Industry Canada Industrie Canada

CA1 IST 40 - A37





Aerospace and Defence-Related Industries Statistical Survey Report – 1996

Table of Contents

- Total Sales vs Gross Output
- Gross Sales vs Order Backlog
- Inventories as a Percentage of Gross Sales
- Gross Sales vs Net Sales
- Gross Output vs Value Added
- Sales by Geographic Area
- Domestic vs Export Sales
- Destination of Export Sales
- Sales to United States
- Foreign Sales (Excluding U.S.)
- Domestic Sales
- Sales by Customer Category
- Sales to Governments
- Sales to Aerospace & Defence Manufactures
- Sales to Other Customers
- Sales to Military and Civilian Markets
- Sales by Sub-Sector
- Sales by Product Category (\$)
- Spares Parts as a Percentage of Sales

- Spares Parts as a Percentage of Sales
- Sales by Region
- Employment by Category
- Distribution of Employment by Region
- Estimate of Output per Employee
- Industry Costs
- Sources of Material Inputs
- Distribution of Investment Expenditures
- Sources of Investment
- DIPP/TPC Repayments
- Annex



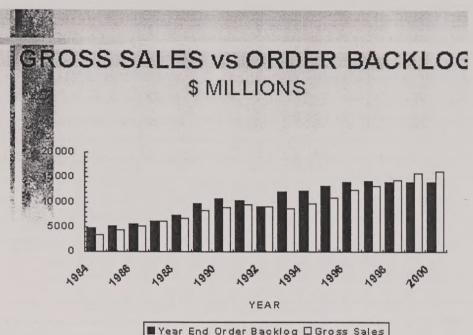
■Total Sales □ Gross Output

Fiscal Year	Total Sales	Gross Output
1984	3482	3654
1985	4438	4681
1986	5198	5432
1987	6184	6323
1988	6902	7530
1989	8230	8452
1990	8844	9145
1991	9593	9235
1992	9196	9262
1993	8683	8902
1994	9820	9761
1995	10727	11289
1996*	12405	12279
1997*	13223	13273
1998*	14373	14351
1999*	15790	15820
2000*	16069	16053
	Annual Growth Rates	
Fiscal Year	Total Sales	Gross Outpu
1985	27%	28%
1986	17%	16%
1987	19%	16%
1988	12%	19%
1989	19%	12%

1990	7%	8%
1991	8%	1%
1992	-4%	0.3%
1993	-6%	-4%
1994	13%	10%
1995	9%	16%
1996*	16%	9%
1997*	7%	8%
1998*	9%	8%
1999*	10%	10%
2000*	2%	1%

Fiscal Year	Total Sales	Gross Output
1984-1991	16%	14%
1991-1993	-5%	-2%
1994-2000	9%	9%





Year E	nd Order	Backlog	□Gross	Sales

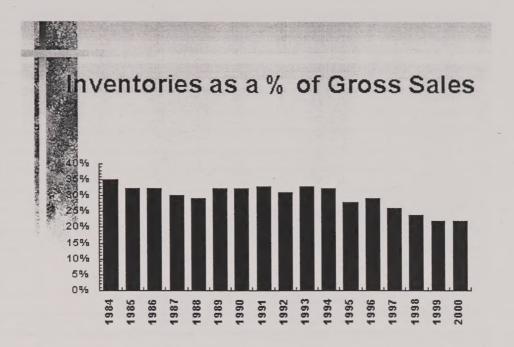
	Order Backlog and Gross Sales ((\$ Millions)
Fiscal Year	Backlog	Gross Sales
1984	4841	3482
1985	5115	4438
1986	5579	5198
1987	6290	6184
1988	7376	6902
1989	9625	8230
1990	10708	8844
1991	10325	9593
1992	9165	9196
1993	12103	8683
1994	12336	9820
1995	13225	10727
1996*	14009	12405
1997*	14385	13223
1998*	14173	14373
1999*	14130	15790
2000*	14113	16069

	Annual Growth Rates	
Fiscal Year	Backlog	Gross Sales
1984	6%	27%
1985	9%	17%
1986	13%	19%
1987	17%	12%
CONTRACTOR OF THE PROPERTY OF		man, permissioner manner and an experience of the second

1988	30%	19%
1989	11%	7%
1990	-4%	8%
1991	-11%	-4%
1992	32%	-6%
1993	2%	13%
1994	7%	9%
1995	6%	16%
1996*	3%	7%
1997*	-1%	9%
1998*	0%	10%
1999*	0%	2%
2000*	-100%	-100%

Fiscal Year	Backlog	Gross Sales
984-1991	11%	16%
991-1993	8%	-5%
994-2000	2%	9%





Inventories as a % of Gross Sales			
Fiscal Year	Inventories	Gross Sales	Percentage
1984	1227	3482	35%
1985	1399	4438	32%
1986	1643	5198	32%
1987	1877	6184	30%
1988	2016	6902	29%
1989	2644	8230	32%
1990	2867	8844	32%
1991	3167	9593	33%
1992	2810	9196	31%
1993	2876	8683	33%
1994	3095	9820	32%
1995	3037	10727	28%
1996*	3599	12405	29%
1997*	3473	13223	26%
1998*	3523	14373	25%
1999*	3500	15790	22%
2000*	3531	16069	22%

Annual Growth Rates			
Fiscal Year	Inventories	Gross Sales	Percentage
1985	14%	27%	-11%
1986	17%	17%	0%
1987	14%	19%	-4%
1988	7%	12%	-4%

1989	31%	19%	10%
1990	8%	7%	1%
1991	10%	8%	2%
1992	-11%	-4%	-7%
1993	2%	-6%	8%
1994	8%	13%	-5%
1995	-2%	9%	-10%
1996*	19%	16%	2%
1997*	-4%	7%	-9%
1998*	1%	9%	-7%
1999*	-1%	10%	-10%
2000*	1%	2%	-1%

Fiscal Year	Inventories	Gross Sales	Percentage
1984-1991	15%	16%	-1%
1991-1993	-5%	-5%	0%
1994-2000	2%	9%	-6%





Fiscal Year	Net Sales	Gross Sales
13 - COMMERCIAN - 101 -	THE PERSON NAME OF STREET OF THE PERSON NAMED	
1984	3332	3482
1985	4166	4438
1986	4905	5198
1987	5708	6184
1988	6415	6902
1989	7373	8230
1990	7993	8844
1991	8747	9593
1992	8595	9196
1993	8171	8683
1994	9369	9820
1995	10034	10727
1996*	11710	12405
1997*	12496	13223
1998*	13554	14373
1999*	14875	15790
2000*	15132	16069

Annual Growth Rates			
Fiscal Year	Net Sales	Gross Sales	
1985	25	27	
1986	18	17	
1987	16	_ 19	
1988	12	12	

1989	15	19
1990	8	7
1991	9	8
1992	-2	4
1993	-5	-6
1994	15	13
1995	8	10
1996*	17	15
1997*	7	7
1998*	8	9
1999*	10	10
2000*	2	2

Fiscal Year	Net Sales	Gross Sales
1984-1991	15	16
1991-1993	-3	-5
1994-2000	8	9

 05) Gross Output vs Value Added

■ Value Added ■ Gross Output

Gross Ouput vs Value Added (\$ Millions)			
Fiscal Year	Gross Output	Value Added 2296	
1984	3654		
1985	4681	2856	
1986	5432	3057	
1987	6323	. 3483	
1988	7530	4548	
1989	8452	4631	
1990	9145	5225	
1991	9235	5058	
1992	9262	5322	
1993	8902	5055	
1994	9761	5460	
1995	11289	6427	
1996*	1996* 12279		
1997*	13273	7391	
1998*	14351	7924	
1999*	15820	8459	
2000*	16053	8719	

Annual Growth Rates				
Fiscal Year	Gross Output	Value Added		
1985	28%	24%		
1986 16%		7%		
1987 16%		14%		
1988 19%		31%		

1989	12%	2%
1990	8%	13%
1991	1%	-3%
1992	0%	5%
1993	-4%	-5%
1994	10%	8%
1995	16%	18%
1996*	9%	4%
1997*	8%	10%
1998*	8%	7%
1999*	10%	7%
2000*	1%	3%

iscal Year	Gross Output	Value Added
984-1991	14%	12%
991-1993	-2%	0%
994-2000	9%	8%





■ Domestic □ U.S. ■ Other Foreign

Sales by Geographic Area (\$ Millions)					
Fiscal Year	Canada	USA	Other Foreign	Total	
1984	871	1839	772	3482	
1985	1535	2185	718	4438	
1986	1701	2455	1041	5198	
1987	2325	2827	1031	6184	
1988	2570	3016	1316	6902	
1989	3001	3449	1779	8230	
1990	2851	3740	2253	8844	
1991	3301	3860	2431	9593	
1992	2978	3824	2393	9196	
1993	2807	3406	2470	8683	
1994	2921	3580	3319	9820	
1995	3516	3788	3424	10727	
1996*	3675	4542	4189	12405	
1997*	3786	4852	4585	13223	
1998*	3597	5592	5184	14373	
1999*	3526	6203	6060	15790	
2000*	3770	6381	5918	16069	

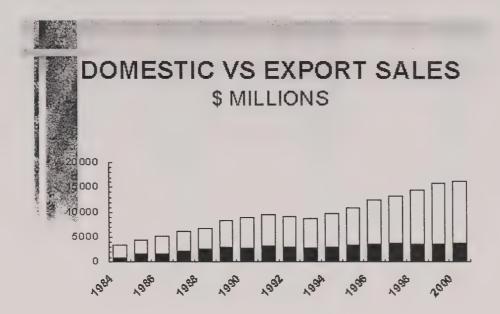
A ALEXANDER OF THE PRODUCT OF THE PR		Percentage of Total Sales by Geographic Area				
Canada	USA	Other Foreign	Total			
25%	53%	22%	100%			
35%	49%	16%	100%			
33%	47%	20%	100%			
38%	_ 46%	17%	100%			
37%	44%	19%	100%			
	25%	25% 53% 35% 49%	25% 53% 22% 35% 49% 16%			

1989	36%	42%	22%	100%
1990	32%	42%	25%	100%
1991	34%	40%	25%	100%
1992	32%	42%	26%	100%
1993	32%	39%	28%	100%
1994	30%	36%	34%	100%
1995	33%	35%	32%	100%
1996*	30%	37%	34%	100%
1997*	29%	37%	35%	100%
1998*	25%	39%	36%	100%
1999*	22%	39%	38%	100%
2000*	23%	40%	37%	100%

Annual Growth Rates					
Fiscal Year	Canada	USA	Other Foreign	Total	
1985	76%	19%	-7%	27%	
1986	11%	12%	45%	17%	
1987	37%	15%	-1%	19%	
1988	11%	7%	28%	12%	
1989	17%	14%	35%	19%	
1990	-5%	8%	27%	7%	
1991	16%	3%	8%	8%	
1992	-10%	-1%	-2%	-4%	
1993	-6%	-11%	3%	-6%	
1994	4%	5%	34%	13%	
1995	20%	6%	3%	9%	
1996*	5%	20%	22%	16%	
1997*	3%	7%	9%	7%	
1998*	-5%	15%	13%	9%	
1999*	-2%	11%	17%	10%	
2000*	7%	3%	-2%	2%	

Fiscal Year	Canada	USA	Other Foreign	Total
1984-1991	21%	11%	18%	16%
1991-1993	-8%	-6%	1%	-5%
1994-2000	4%	1%	2%	9%





■ Domestic □ Exports

Domestic vs Export Sales (\$ Millions)				
Fiscal Year	Domestic	Exports	Total	
1984	871	2611	3482	
1985	1535	2903	4438	
1986	1701	3496	5198	
1987	2325	3858	6184	
1988	2570	4332	6902	
1989	3001	5229	8230	
1990	2851	5993	8844	
1991	3301	6291	9593	
1992	2978	6218	9196	
1993	2807	5876	8683	
1994	2921	6899	9820	
1995	3516	7211	10727	
1996*	3675	8731	12405	
1997*	3786	9437	13223	
1998*	3597	10776	14373	
1999*	3526	12264	15790	
2000*	3770	12299	16069	

Percentage of Total Sales					
Fiscal Year	Domestic	Exports	Total		
1984	25%	75%	100%		
1985	35%	65%	100%		
1986	33%	67%	100%		
1987	38%	62%	100%		
1988	37%	63%	100%		

1989	36%	64%	100%
1990	32%	68%	. 100%
1991	34%	66%	100%
1992	32%	68%	100%
1993	32%	68%	100%
1994	30%	70%	100%
1995	33%	67%	100%
1996*	30%	70%	100%
1997*	29%	71%	100%
1998*	25%	75%	100%
1999*	22%	78%	100%
2000*	23%	77%	100%

Annual Growth Rates					
Fiscal Year	Domestic	Exports	Total		
1985	76%	11%	27%		
1986	11%	20%	17%		
1987	37%	10%	19%		
1988	11%	12%	12%		
1989	17%	21%	19%		
1990	-5%	15%	7%		
1991	16%	5%	8%		
1992	-10%	-1%	-4%		
1993	-6%	-6%	-6%		
1994	4%	17%	13%		
1995	20%	5%	9%		
1996*	5%	21%	16%		
1997*	3%	8%	7%		
1998*	-5%	14%	9%		
1999*	-2%	14%	10%		
2000*	7%	0%	2%		

iscal Year	Domestic	Exports	Total
1984-1991	21%	13%	16%
1991-1993	-8%	-3%	-5%
1994-2000	4%	10%	9%





■ U.S. Sales | Other Foreign Sales

Fiscal Year	USA	Other Foreign	Total 2611	
1984	1839	772		
1985	2185	718	2903	
1986	2455	1041	3496	
1987	2827	1031	3858	
1988	3016	1316	4332	
1989	3449	1779	5229	
1990	3740	2253	5993	
1991	3860	2431	6291	
1992	3824	2393	6218	
1993	3406	2470	5876	
1994	3580	3319	6899	
1995	3788	3424	7211	
1996*	4542	4189	8731	
1997*	4852	4585	9437	
1998*	5592	5184	10776	
1999*	6203	6060	12264	
2000*	6381	5918	12299	

Percentage of Total Export Sales					
Fiscal Year	USA	Other Foreign	Total		
1984	70%	30%	100%		
1985	75%	25%	100%		
1986	70%	30%	100%		
1987	73%	27%	100%		
1988	70%	30%	100%		

1989	66%	34%	100%
1990	62%	38%	100%
1991	61%	39%	100%
1992	61%	38%	100%
1993	58%	42%	100%
1994	52%	48%	100%
1995	53%	47%	100%
1996*	52%	48%	100%
1997*	51%	49%	100%
1998*	52%	48%	100%
1999*	51%	49%	100%
2000*	52%	48%	100%

,	Annual Growth Rates					
Fiscal Year	USA	Other Foreign	Total			
1985	19%	-7%	-11%			
1986	12%	45%	-20%			
1987	15%	-1%	-10%			
1988	7%	28%	-12%			
1989	14%	35%	-21%			
1990	8%	27%	-15%			
1991	3%	8%	-5%			
1992	-1%	-2%	1%			
1993	-11%	3%	6%			
1994	5%	34%	-17%			
1995	6%	3%	-5%			
1996*	20%	22%	-21%			
1997*	7%	9%	-8%			
1998*	15%	13%	-14%			
1999*	11%	17%	-14%			
2000*	3%	-2%	0%			

Fiscal Year	USA	Other Foreign	Total
1984-1991	11%	18%	13%
1991-1993	-6%	1%	-3%
1994-2000	10%	10%	10%





■Government □A&D Manufacturers ■Other Customers

Sales to US (\$ Millions)					
	A&D		Other	2	
Fiscal Year	Government	Companies	Customers	Total	
1984	299	926	614	1839	
1985	317	1134	734	2185	
1986	303	1330	821	2455	
1987	409	1418	1001	2827	
1988	372	1532	1112	3016	
1989	374	1616	1459	3449	
1990	296	1857	1587	3740	
1991	306	1937	1618	3860	
1992	316	1702	1806	3824	
1993	306	1201	1899	3406	
1994	257	1231	2092	3580	
1995	368	1515	1905	3788	
1996*	372 -	1629	2540	4542	
1997*	419	1831	2602	4852	
1998*	525	2192	2875	5592	
1999*	518	2327	3358	6203	
2000*	562	2377	3442	6381	

Percentage of Total Sales to U.S.					
as a company to the second	A&D	Other			
Government	Companies	Customers	Total		
16%	50%	33%	100%		
15%	52%	34%	100%		
12%	54%	33%	100%		
	Government 16%	A&D Government Companies 16% 50%	A&D Other Government Companies Customers 16% 50% 33% 15% 52% 34% 12% 54% 33%		

1987	14%	50%	35%	100%
1988	12%	51%	37%	100%
1989	11%	47%	42%	100%
1990	8%	50%	42%	100%
1991	8%	50%	42%	100%
1992	8%	45%	47%	100%
1993	9%	35%	56%	100%
1994	7%	34%	58%	100%
1995	10%	40%	50%	100%
1996*	8%	36%	56%	100%
1997*	9%	38%	54%	100%
1998*	9%	39%	51%	100%
1999*	8%	38%	54%	100%
2000*	9%	37%	54%	100%

	Ar	nnual Growth Rates		
		A&D	Other	The control of the second of the control of the con
Fiscal Year	Government	Companies	Customers	Total
1985	6%	22%	20%	19%
1986	-4%	17%	12%	12%
1987	35%	7%	22%	15%
1988	-9%	8%	11%	7%
1989	1%	5%	31%	14%
1990	-21%	15%	9%	8%
1991	3%	4%	2%	3%
1992	3%	-12%	12%	-1%
1993	-3%	-29%	5%	-11%
1994	-16%	2%	10%	5%
1995	43%	23%	-9%	6%
1996*	1%	8%	33%	20%
1997*	13%	12%	2%	7%
1998*	25%	20%	10%	15%
1999*	-1%	6%	17%	11%
2000*	8%	2%	3%	3%

	Other	A&D		
Total	Customers	Companies	Government	Fiscal Year
11%	15%	11%	0%	1984-1991
-6%	8%	-21%	0%	1991-1993
10%	9%	12%	14%	1994-2000





■Government □A&D Manufacturers ■Other Customers

Sales to Other Foreign Customers (excl. U.S.) (\$ Millions)					
		A&D	Other		
Fiscal Year	Governments	Companies	Customers	Total	
1984	122	242	408	772	
1985	176	261	280	718	
1986	338	310	. 393	1041	
1987	253	386	391	1031	
1988	242	429	646	1316	
1989	365	610	804	1779	
1990	354	589	1310	2253	
1991	445	577	1409	2431	
1992	572	611	1211	2393	
1993	245	847	1378	2470	
1994	500	1188	1631	3319	
1995	880	583	1960	3424	
1996*	901	612	2676	4189	
1997*	985	674	2926	4585	
1998*	1118	747	3319	5184	
1999*	1278	783	3999	6060	
2000*	1007	815	4096	5918	

Percentage of Total Other Foreign Sales					
*	LEE II (30 30 VALV V 61) I ANDREWS VILLE STREET, AND	A&D	Other		
Fiscal Year	Governments	Companies	Customers	Total	
1984	16%	31%	53%	100%	
1985	25%	36%	39%	100%	
1986	32%	30%	38%	100%	

1987	25%	37%	38%	100%
1988	18%	33%	49%	100%
1989	21%	34%	45%	100%
1990	16%	26%	58%	100%
1991	18%	24%	58%	100%
1992	24%	26%	51%	100%
1993	10%	34%	56%	100%
1994	15%	36%	49%	100%
1995	26%	17%	57%	100%
1996*	22%	15%	64%	100%
1997*	21%	15%	64%	100%
1998*	22%	14%	64%	100%
1999*	21%	13%	66%	100%
2000*	17%	14%	69%	100%

Annual Growth Rates					
		A&D	Other		
Fiscal Year	Governments	Companies	Customers	Total	
1985	44%	8%	-31%	-7%	
1986	92%	19%	40%	45%	
1987	-25%	25%	-1%	-1%	
1988	-4%	11%	65%	28%	
1989	51%	42%	24%	35%	
1990	-3%	-3%	63%	27%	
1991	26%	-2%	8%	8%	
1992	29%	6%	-14%	-2%	
1993	-57%	39%	14%	3%	
1994	104%	40%	18%	34%	
1995	76%	-51%	20%	3%	
1996*	2%	5%	37%	22%	
1997*	9%	10%	9%	9%	
1998*	14%	11%	13%	13%	
1999*	14%	5%	20%	17%	
2000*	-21%	4%	2%	-2%	

		A&D	Other	
Fiscal Year	Governments	Companies	Customers	Total
1984-1991	20%	13%	- 19%	18%
1991-1993	-26%	21%	-1%	1%
1994-2000	12%	39%	17%	10%



3 of 3



Government [] A&D Manufacturers Gotter Customers

Sales to Domestic Customers (\$ Millions)					
va		A&D	Other		
Fiscal Year	Government	Companies	Customers	Total	
1984	417	150	305	871	
1985	820	272	443	1535	
1986	884	292	525	1701	
1987	1074	475	776	2325	
1988	1244	486	840	2570	
1989	1331	857	812	3001	
1990	1272	851	729	2851	
1991	1656	846	800	3301	
1992	1595	600	783	2978	
1993	1693	512	602	2807	
1994	1680	450	790	2921	
1995	1751	693	1072	3516	
1996*	2022	695	957	3675	
1997*	2104	727	955	3786	
1998*	1786	819	992	3597	
1999*	1542	914	1070	3526	
2000*	1779	937	1054	3770	

	Pe	rcentage of Total	Canadian Sales	
aurum varingangenennenfort verbrottenstelt		A&D	Other	
Fiscal Year	Government	Companies	Customers	Total
1984	48%	17%	35%	100%
1985	53%	18%	29%	100%

1986	52%	17%	31%	100%
1987	46%	20%	33%	100%
1988	48%	19%	33%	100%
1989	44%	29%	27%	100%
1990	45%	30%	26%	100%
1991	50%	26%	24%	100%
1992	54%	20%	26%	100%
1993	60%	18%	21%	100%
1994	58%	15%	27%	100%
1995	50%	20%	30%	100%
1996*	55%	19%	26%	100%
1997*	56%	19%	25%	100%
1998*	50%	23%	28%	100%
1999*	44%	26%	30%	100%
2000*	47%	25%	28%	100%

	Annual Growth Rates					
the first and the section of the first state of the section of the		A&D	Other			
Fiscal Year	Government	Companies	Customers	Total		
1985	97%	81%	45%	76%		
1986	8%	7%	19%	11%		
1987	21%	63%	48%	37%		
1988	16%	2%	8%	11%		
1989	7%	76%	-3%	17%		
1990	-4%	-1%	-10%	-5%		
1991	30%	-1%	10%	16%		
1992	-4%	-29%	-2%	-10%		
1993	6%	-15%	-23%	-6%		
1994	-1%	-12%	31%	4%		
1995	4%	54%	36%	20%		
1996*	15%	0%	-11%	5%		
1997*	4%	5%	0%	3%		
1998*	-15%	13%	4%	-5%		
1999*	-14%	12%	8%	-2%		
2000*	15%	3%	-1%	7%		

		A&D	Other	
Fiscal Year	Government	Companies	Customers	Total
1984-1991	22%	28%	15%	21%
1991-1993	1%	-22%	-13%	-8%
1994-2000	1%	13%	5%	4%

Years with * are Forecast





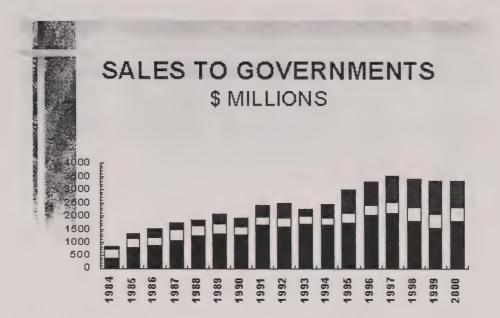
	Tota	Sales by Cust	tomer (\$ Millions)	
Fiscal Year	Government	A&D Companies	Other Customers	Total
1984	837	1318	1327	3482
1985	1314	1666	1457	4438
1986	1526	1933	1739	5198
1987	1736	2279	2168	6184
1988	1857	2447	2598	6902
1989	2071	3083	3076	8230
1990	1921	3297	3626	8844
1991	2407	3359	3826	9593
1992	2482	2914	3799	9196
1993	2244	2559	3879	8683
1994	2437	2869	4514	9820
1995	3000	2791	4937	10727
1996*	3295	2937	6173	12405
1997*	3507	3232	6484	13223
1998*	3430	3757	7186	14373
1999*	3337	4025	8427	15790
2000*	3347	4130	8592	16069
	Pe	rcentage of Sa	les to Customer	
Fiscal Year	Government	A&D Companies	Other Customers	Total .
1984	24%	38%	38%	100%
1985	30%	38%	33%	100%
1986	29%	37%	33%	100%
*		1		

1987	28%	37%	35%	100%
1988	27%	35%	38%	100%
1989	25%	37%	37%	100%
1990	22%	37%	41%	100%
1991	25%	35%	40%	100%
1992	27%	32%	41%	100%
1993	26%	29%	45%	100%
1994	25%	29%	46%	100%
1995	28%	26%	46%	100%
1996*	27%	24%	50%	100%
1997*	27%	24%	49%	100%
1998*	24%	26%	50%	100%
1999*	21%	25%	53%	100%
2000*	21%	26%	53%	100%

A CONTRACTOR OF THE CONTRACTOR	Annual Growth Rates					
		A&D	Other			
Fiscal Year	Government	Companies	Customers	Total		
1985	57%	26%	10%	27%		
1986	16%	16%	19%	17%		
1987	14%	18%	25%	19%		
1988	7%	7%	20%	12%		
1989	12%	26%	18%	19%		
1990	-7%	7%	18%	7%		
1991	25%	2%	6%	8%		
1992	3%	-13%	-1%	-4%		
1993	-10%	-12%	2%	-6%		
1994	9%	12%	16%	13%		
1995	23%	-3%	9%	9%		
1996*	10%	5%	25%	16%		
1997*	6%	10%	5%	7%		
1998*	-2%	16%	11%	9%		
1999*	-3%	7%	17%	10%		
2000*	0%	3%	2%	2%		

A&D Companies	Other Customers	Total
Companies	Customers	Total
		Total
14%	16%	16%
-13%	1%	-5%
6%	11%	9%
		-13% 1%





■ Canadian 🗆 U.S. ■ Other Foreign

	Sales To Governments (\$ Millions)					
Fiscal Year	Canadian	U.S.	Other Foreign	Total		
1984	417	299	122	837		
1985	820	317	176	1314		
1986	884	303	338	1526		
1987	1074	409	253	1736		
1988	1244	372	242	1857		
1989	1331	374	365	2071		
1990	1272	296	354	1921		
1991	1656	306	445	2407		
1992	1595	316	572	2482		
1993	1693	306	245	2244		
1994	1680	257	500	2437		
1995	1751	368	880	3000		
1996*	2022	372	901	3295		
1997*	2104	419	985	3507		
1998*	1786	525	1118	3430		
1999*	1542	518	1278	3337		
2000*	1779	562	1007	3347		

Percentage of Total Sales					
Fiscal Year	Canadian	U.S.	Other Foreign	Total	
1984	50%	36%	15%	100%	
1985	62%	24%	13%	100%	
1986	58%	20%	22%	100%	
1987	62%	24%	15%	100%	
1988	67%	20%	13%	100%	

1989	64%	18%	18%	100%
1990	66%	15%	18%	100%
1991	69%	13%	18%	100%
1992	64%	13%	23%	100%
1993	75%	14%	11%	100%
1994	69%	11%	21%	100%
1995	58%	12%	29%	100%
1996*	61%	11%	27%	100%
1997*	60%	12%	28%	100%
1998*	52%	15%	33%	100%
1999*	46%	16%	38%	100%
2000*	53%	17%	30%	100%

Annual Growth Rates					
Fiscal Year	Canadian	U.S.	Other Foreign	Total	
1985	97%	6%	44%	57%	
1986	8%	-4%	92%	16%	
1987	21%	35%	-25%	14%	
1988	16%	-9%	-4%	7%	
1989	7%	1%	51%	12%	
1990	-4%	-21%	-3%	-7%	
1991	30%	3%	26%	25%	
1992	-4%	3%	29%	3%	
1993	6%	-3%	-57%	-10%	
1994	-1%	-16%	104%	9%	
1995	4%	43%	76%	23%	
1996*	15%	1%	2%	10%	
1997*	4%	13%	9%	6%	
1998*	-15%	25%	14%	-2%	
1999*	-14%	-1%	14%	-3%	
2000*	15%	8%	-21%	0%	

Fiscal Year	Canadian	U.S.	Other Foreign	Total
1984-1991	22%	0%	20%	16%
1991-1993	1%	0%	-26%	-3%
1994-2000	1%	14%	12%	5%





Sales to Aerospace & Defence Manufacturers (\$ Millions)						
			Other I	Foreign		
Fiscal Year	Canadian	U.S.	excl. U.S.A	TOTAL		
1984	150	926	242	1318		
1985	272	1134	261	1666		
1986	292	1330	310	1933		
1987	475	1418	386	2279		
1988	486	1532	429	2447		
1989	857	1616	610	3083		
1990	851	1857	589	3297		
1991	846	1937	577	3359		
1992	600	1702	611	2914		
1993	512	1201	847	2559		
1994	450	1231	1188	2869		
1995	693	1515	583	2791		
1996*	695	1629	612	2937		
1997*	727	1831	674	3232		
1998*	819	2192	747	3757		
1999*	914	2327	783	4025		
2000*	937	2377	815	4130		

			otal A&D Sales	
		THE PERSON NAMED AND PERSON NAMED IN COLUMN 2 ASSESSMENT AND ASSESSMENT OF THE PERSON NAMED IN COLUMN 2 ASSESSMENT AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASSES	Other F	oreign
Fiscal Year	Canadian	U.S.	excl. U.S.A	TOTAL
1984	11%	70%	18%	100% _
1985	16%	68%	16%	100%

1986	15%	69%	16%	100%
1987	21%	62%	17%	100%
1988	20%	63%	18%	100%
1989	28%	52%	20%	100%
1990	26%	56%	18%	100%
1991	25%	58%	17%	100%
1992	21%	58%	21%	100%
1993	20%	47%	33%	100%
1994	16%	43%	41%	100%
1995	25%	54%	21%	100%
1996*	24%	55%	21%	100%
1997*	22%	57%	21%	100%
1998*	22%	58%	20%	100%
1999*	23%	58%	19%	100%
2000*	23%	58%	20%	100%

		Annual Gro	wth Rates	
			Other F	oreign
Fiscal Year	Canadian	U.S.	excl. U.S.A	TOTAL
1985	81%	22%	8%	26%
1986	7%	17%	19%	16%
1987	63%	7%	25%	18%
1988	2%	8%	11%	7%
1989	76%	5%	42%	26%
1990	-1%	15%	-3%	7%
1991	-1%	4%	-2%	2%
1992	-29%	-12%	6%	-13%
1993	-15%	-29%	39%	-12%
1994	-12%	2%	40%	12%
1995	54%	23%	-51%	-3%
1996*	0%	8%	5%	5%
1997*	5%	12%	10%	10%
1998*	13%	20%	11%	16%
1999*	12%	6%	5%	7%
2000*	3%	2%	4%	3%

Fiscal Year	Canadian	U.S.	Other Foreign	
			excl. U.S.A	TOTAL
1984-1991	28%	11%	13%	14%
1991-1993	-22%	-21%	21%	-13%
1994-2000	13%	12%	-6%	6% ·





■ Canada 🗆 U .	S. 🖪 Other Foreign
----------------	--------------------

	Sale	s to Other Custo	omers (\$ Millions)	
	(excluding gover	nments & Aerosp	ace & Defence manufa	icturers)
Fiscal Year			Foreign	Total
1984	305	614	408	1327
1985	443	734	280	1457
1986	525	821	393	1739
1987	776	1001	391	2168
1988	840	1112	646	2598
1989	812	1459	804	3076
1990	729	1587	1310	3626
1991	800	1618	1409	3826
1992	783	1806	1211	3799
1993	602	1899	1378	3879
1994	790	2092	1631	4514
1995	1072	1905	1960	4937
1996*	957	2540	2676	6173
1997*	955	2602	2926	6484
1998*	992	2875	3319	7186
1999*	1070	3358	3999	8427
2000*	1054	3442	4096	8592

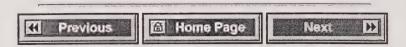
Percentage of Total Other Sales						
Fiscal Year	Canadian	U.S.	Foreign	Total		
1984	23%	46%	31%	100%		
1985	30%	50%	19%	100%		

1986	30%	47%	23%	100%
1987	36%	46%	18%	100%
1988	32%	43%	25%	100%
1989	26%	47%	26%	100%
1990	20%	44%	36%	100%
1991	21%	42%	37%	100%
1992	21%	48%	32%	100%
1993	16%	49%	36%	100%
1994	18%	46%	36%	100%
1995	22%	39%	40%	100%
1996*	16%	41%	43%	100%
1997*	15%	40%	45%	100%
1998*	14%	40%	46%	100%
1999*	13%	40%	47%	100%
2000*	12%	40%	48%	100%

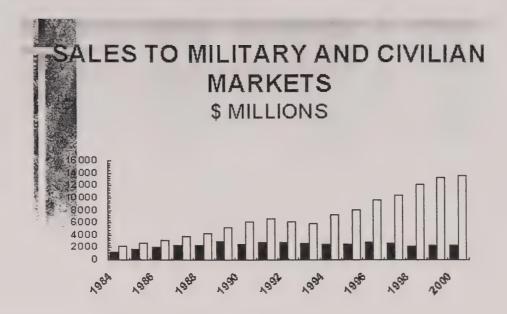
Annual Growth Rates						
Fiscal Year	Canadian	U.S.	Foreign	Total		
1985	45%	20%	-31%	10%		
1986	19%	12%	40%	19%		
1987	48%	22%	-1%	25%		
1988	8%	11%	65%	20%		
1989	-3%	31%	24%	18%		
1990	-10%	9%	63%	18%		
1991	10%	2%	8%	6%		
1992	-2%	12%	-14%	-1%		
1993	-23%	5%	14%	2%		
1994	31%	10%	18%	16%		
1995	36%	-9%	20%	9%		
1996*	-11%	33%	37%	25%		
1997*	0%	2%	9%	5%		
1998*	4%	10%	13%	11%		
1999*	8%	17%	20%	17%		
2000*	-1%	3%	2%	2%		

Compound Annual Average Rate of Growth					
Fiscal Year	Canadian	U.S.	Foreign	Total	
1984-1991	15%	15%	19%	16%	
1991-1993	-13%	8%	-1%	1%	
1994-2000	5%	9%	17%	11%	

Years with * are Forecast



3 of 3



■Military □Civilian

Sales to Military and Civilian Markets (\$ Millions)						
Fiscal Year	Military	Civilian	Total			
1984	1261	2220	3482			
1985	1717	2720	4438			
1986	2015	3182	5198			
1987	2415	3769	6184			
1988	2515	4386	6902			
1989	3004	5226	8230			
1990	2629	6215	8844			
1991	2937	6656	9593			
1992	2907	6288	9196			
1993	2790	5893	8683			
1994	2897	6922	9820			
1995	3068	7659	10727			
1996*	3486	8920	12405			
1997*	3513	9710	13223			
1998*	3454	10919	14373			
1999*	3581	12208	15790			
2000*	3585	12484	16069			

	Percentage of Total Sales						
Fiscal Year	Military	Civilian	Total				
1984	36%	64%	100% ·				
1985	39%	61%	100%				
1986	39%	61%	100%				
1987	39%	61%	100%				

1988	36% 64%		100%
1989	37%	63%	100%
1990	30%	70%	100%
1991	31%	69%	100%
1992	32%	68%	100%
1993	32%	68%	100%
1994	30%	70%	100%
1995	29%	71%	100%
1996*	28%	72%	100%
1997*	27%	73%	100%
1998*	24%	76%	100%
1999*	23%	77%	100%
2000*	22%	78%	100%

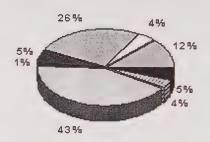
	Annual Growth Rates					
Fiscal Year	Military	Civilian	Total			
1985	36%	23%	27%			
1986	17%	17%	17%			
1987	20%	18%	19%			
1988	4%	16%	12%			
1989	19%	19%	19%			
1990	-12%	19%	7%			
1991	12%	7%	8%			
1992	-1%	-6%	-4%			
1993	-4%	-6%	-6%			
1994	4%	17%	13%			
1995	6%	11%	9%			
1996*	14%	16%	16%			
1997*	1%	9%	7%			
1998*	-2%	12%	9%			
1999*	4%	12%	10%			
2000*	0%	2%	2%			

Fiscal Year	Military	Civilian	Total
1984-1991	13%	17%	16%
1991-1993	3%	-6%	-5%
1994-2000	4%	10%	9%





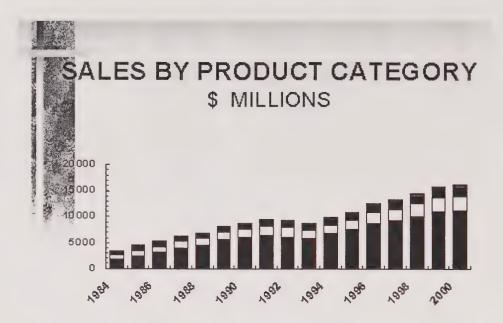
SALES BY SUB-SECTOR % OF TOTAL SALES



		Sale	s by Sub-Se	ector (\$ Mil	lions)		
Fiscal Year	Airframe	Propulsion	Avionics	Space	Defence Electronics	Other	Total
1984	1260	1129	638	186	34	235	3482
1985	1548	1450	816	248	41	335	4438
1986	2088	1526	729	225	41	589	5198
1987	2105	1696	849	292	74	1168	6184
1988	2528	1814	866	348	472	873	6902
1989	2972	2320	830	292	1019	839	8271
1990	3347	2518	944	414	957	715	8895
1991	3531	2446	910	561	1145	1058	9652
1992	3272	2339	791	570	1148	1076	9196
1993	3058	2242	647	497	992	1247	8683
1994	3879	2392	674	407	1067	1401	9820
1995	4561	2786	951	403	854	1172	10727
1996*	5809	2903	1014	444	863	1373	12405
1997*	6273	3036	1108	510	945	1350	13223
1998*	6958	3234	1291	521	1046	1323	14373
1999*	7826	3451	1372	547	1139	1454	15790
2000*	7879	3585	1435	550	1214	1406	16069
-	A Constitution of the Control of the Control	5	Percentage	of Total Sal	es	A A A A A A A A A A A A A A A A A A A	1
Fiscal Year	Airframe	Propulsion	Avionics	Space	Defence Electronics	Other	Total
1984	36%	32%	18%	5%	1%	7%	. 100%
1985	35%	33%	18%	6%	1%	8%	100%
1986	40%	29%	14%	4%	1%	11%	100%
1987	34%	27%	14%	5%	1%	19%	100%

1988	37%	26%	13%	5%	7%	13%	100%
1989	36%	28%	10%	4%	12%	10%	100%
1990	38%	28%	11%	5%	11%	8%	100%
1991	37%	25%	9%	6%	12%	11%	100%
1992	36%	25%	9%	6%	12%	12%	100%
1993	35%	26%	7%	6%	11%	14%	100%
1994	40%	24%	7%	4%	11%	14%	100%
1995	43%	26%	9%	4%	8%	11%	100%
1996*	47%	23%	8%	4%	7%	11%	100%
1997*	47%	23%	8%	4%	7%	10%	100%
1998*	48%	23%	9%	4%	7%	9%	100%
1999*	50%	22%	9%	3%	7%	9%	100%
2000*	49%	22%	9%	3%	8%	9%	100%
		3	Annual Gr	owth Rate	S		
Fiscal Year	Airframe	Propulsion	Avionics	Space	Defence Electronics	Other	Total
1985	23%	28%	28%	33%	NA	NA	27%
1986	35%	5%	-11%	-9%	NA .	NA	17%
1987	1%	11%	16%	30%	80%	98%	19%
1988	20%	7%	2%	19%	538%	-25%	12%
1989	18%	28%	-4%	-16%	116%	-4%	20%
1990	13%	9%	14%	42%	-6%	-15%	8%
1991	5%	-3%	-4%	36%	20%	48%	9%
1992	-7%	-4%	-13%	2%	0%	2%	-5%
1993	-7%	-4%	-18%	-13%	-14%	16%	-6%
1994	27%	7%	4%	-18%	8%	12%	13%
1995	18%	16%	41%	-1%	-20%	-16%	9%
1996*	27%	4%	7%	10%	1%	17%	16%
1997*	8%	5%	9%	15%	10%	-2%	7%
1998*	11%	7%	17%	2%	11%	-2%	9%
1999*	12%	7%	6%	5%	9%	10%	10%
2000*	1%	4%	5%	1%	7%	-3%	2%
. 101 1 1000 11111111 1111111 1111111111	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NAMED IN COLUMN TRANSPORT NAMED IN COLUMN	Compoun	d Annual A	verage Rat	e of Growth		
Fiscal Year	Airframe	Propulsion	Avionics	Space	Defence Electronics	Other	Total
1984-1991	16%	12%	5%	17%	NA	24%	16%
1991-1993	-2%	-1%	-5%	-2%	-2%	2%	-2%
1994-2000	11%	5%	11%	4%	1%	1%	7%





■ Proprietar; Products □ Sub-Contracts ■ Agenc; Sales ■ Repair & Overhaul ■ Services

	1.2/	Sales by Produ	ict Category	(\$ Millions)	1.031 10.033	
Fiscal Year	Proprietary Products	Sub-Contracts	Agency Sales	Repair & Overhaul	Services	Total
1984	1971	700	217	593	0	3481
1985	2489	973	280	696	0	4438
1986	3136	1104	253	704	0	5197
1987	4050	1216	223	694	0	6184
1988	4552	1315	258	620	159	6904
1989	5687	1356	196	783	221	8243
1990	6140	1402	193	899	212	8847
1991	6403	1862	154	937	239	9595
1992	6098	1790	151	951	214	9204
1993	5952	1480	117	879	255	8683
1994	6852	1635	113	907	314	9821
1995	7529	1735	171	976	316	10727
1996*	8797	1952	194	1090	373	12406
1997*	9317	2100	219	1199	387	13222
1998*	9980	2426	233	1299	435	14373
1999*	11027	2647	249	1363	504	15790
2000*	11236	2659	261	1409	505	16069
AAAA TABOO A AATAAT A SE ETITET AA . B TATTA	4. 3 50000 40000 4000 4000 4000 4000 4000	Annua	I Growth Ra	tes		
Fiscal Year	Proprietary Products	Sub-Contracts	Agency Sales	Repair & Overhaul	Services	Total
1985	26%	39%	29%	17%	NA	27%
1986	26%	13%	-10%	1%	NA	17%
1987	29%	10%	-12%	-1%	NA	19%
1988	12%	8%	16%	-11%	NA	12%
1989	25%	3%	-24%	26%	39%	19%
1990	8%	3%	-2%	15%	-4%	7%

1990	8%	3%	-2%	15%	-4%	7%
1991	4%	33%	-20%	4%.	13%	8%
1992	-5%	-4%	-2%	1%	-10%	-4%
1993	-2%	-17%	-23%	-8%	19%	-6%
1994	15%	10%	-3%	3%	23%	13%
1995	10%	6%	51%	8%	1%	9%
1996*	17%	13%	13%	12%	18%	16%
1997*	6%	8%	13%	10%	4%	7%
1998*	7%	16%	6%	8%	12%	9%
1999*	10%	9%	7%	5%	16%	10%
2000*	2%	0%	5%	3%	0%	2%
	С	ompound Annu	ial Average R	ate of Growth		~~~~
Fiscal Year	Proprietary Products	Sub-Contracts	Agency Sales	Repair & Overhaul	Services	Total
1984-1991	18%	15%	-5%	7%	NA	16%
1991-1993	-4%	-11%	-13%	-3%	3%	-5%
1994-2000	9%	8%	15%	8%	8%	9%
		Years v	vith * are Fore	cast		







	Spa	re Parts (\$Millions)	
Fiscal Year	Spare Parts	Gross Sales	Percent
1984	3	3481	0%
1985	96	4438	2%
1986	767	5197	15%
1987	974	6184	16%
1988	1110	6904	16%
1989	1430	8243	17%
1990	1440	8847	16%
1991	1576	9595	16%
1992	1261	9204	14%
1993	1826	8683	21%
1994	1927	9821	20%
1995	1603	10727	15%
1996*	1807	12406	15%
1997*	1993	13222	15%
1998*	2196	14373	15%
1999*	2412	15790	15%
2000*	2485	16069	15%
	An	nual Growth Rates	
Fiscal Year	Spare Parts	Gross Sales	Percent
1985	3100%	27%	2410%
1986	699%	17%	582%
1987	27%	19%	7%
1988	14%	12%	2%
1989	29%	19%	- 8%
1990	1%	7%	-6%

1990	8%	3%	-2%	15%	-4%	7%
1991	4%	33%	-20%	4%	13%	8%
1992	-5%	-4%	-2%	1%	-10%	-4%
1993	-2%	-17%	-23%	-8%	19%	-6%
1994	15%	10%	-3%	3%	23%	13%
1995	10%	6%	51%	8%	1%	9%
1996*	17%	13%	13%	12%	18%	16%
1997*	6%	8%	13%	10%	4%	7%
1998*	7%	16%	6%	8%	12%	9%
1999*	10%	9%	7%	5%	16%	10%
2000*	2%	0%	5%	3%	0%	2%
	C	ompound Annu	ıal Average R	ate of Growth		
Fiscal Year	Proprietary Products	Sub-Contracts	Agency Sales	Repair & Overhaul	Services	Total
1984-1991	18%	15%	-5%	7%	NA	16%
1991-1993	-4%	-11%	-13%	-3%	3%	-5%
1994-2000	9%	8%	15%	8%	8%	9%
		Years v	vith * are Fore	cast		100 100 100 100 100 100 100 100 100 100





■Maritim es □ Quebec ■ Ontario ■ Manitoba □ Prairies □ B.C.

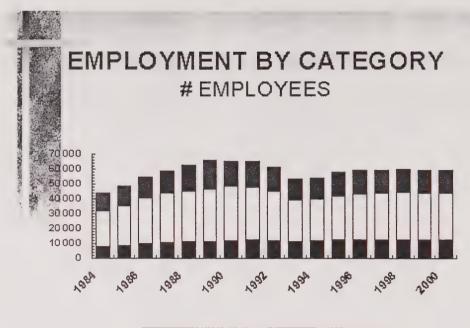
		S	ales by F	Regions (\$	Millions)		
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1984	61	1610	1557	160	46	47	3482
1985	99	1905	2093	200	54	87	4438
1986	114	2088	2622	205	66	102	5198
1987	155	2759	2814	280	75	101	6184
1988	174	3052	3083	382	97	114	6902
1989	199	3861	3544	420	83	122	8230
1990	229	4073	3712	587	108	136	8844
1991	224	4552	4025	504	120	169	9593
1992	276	4566	3606	513	102	132	9196
1993	252	4631	3105	465	102	128	8683
1994	230	5381	3556	448	109	97	9820
1995	180	5992	3622	386	326	220	10727
1996*	167	6955	4284	400	344	256	12405
1997*	171	7304	4591	488	370	298	13223
1998*	176	7765	5120	578	394	339	14373
1999*	191	8390	5855	577	432	345	15790
2000*	197	8328	6130	598	459	357	16069
	****	3-2	Percent	age of Tota	Sales		
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1984	2%	46%	45%	5%	1%	1%	100%
1985	2%	43%	47%	5%	1%	2%	100%
1986	2%	40%	50%	4%	1%	2%	100%
1987	3%	45%	46%	5%	1%	2%	100%
1988	3%	44%	45%	6%	1%	2%	100%

1991	9%	8%	1%
1992	-20%	-4%	-17%
1993	45%	-6%	53%
1994	6%	13%	-7%
1995	-17%	9%/	-24%
1996*	13%	16%	-3%
1997*	10%	/7%	3%
1998*	10%	9%	1%
1999*	10%	10%	0%
2000*	3%	2%	1%
	Compound An	nual Average Rate of	f Growth
Fiscal Year	Spare Parts	Gross Sales	Percent
1984-1991	145%/	16%	112%
1991-1993	8%	-5%	13%
1994-2000	/4%	9%	-4%
	Year	s with * are Forecast	



1989	2%	47%	43%	5%	1%	1%	100%
1990	3%	46%	42%	7%	1%	2%	100%
1991	2%	47%	42%	5%	1%	2%	100%
1992	3%	50%	39%	6%	1%	1%	100%
1993	3%	53%	36%	5%	1%	1%	100%
1994	2%	55%	36%	5%	1%	1%	100%
1995	2%	56%	34%	4%	3%	2%	100%
1996*	1%	56%	35%	3%	3%	2%	100%
1997*	1%	55%	35%	4%	3%	2%	100%
1998*	1%	54%	36%	4%	3%	2%	100%
1999*	1%	53%	37%	4%	3%	2%	100%
2000*	1%	52%	38%	4%	3%	2%	100%
		·	Annu	al Growth R	lates	······································	
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1985	62%	18%	34%	25%	17%	85%	27%
1986	15%	10%	25%	3%	22%	17%	17%
1987	36%	32%	7%	37%	14%	-1%	19%
1988	12%	11%	10%	36%	29%	13%	12%
1989	14%	27%	15%	10%	-14%	7%	19%
1990	15%	5%	5%	40%	30%	11%	7%
1991	-2%	12%	8%	-14%	11%	24%	8%
1992	23%	0.3%	-10%	2%	-15%	-22%	-4%
1993	-9%	1%	-14%	-9%	0%	-3%	-6%
1994	-9%	16%	15%	-4%	7%	-24%	13%
1995	-22%	11%	2%	-14%	199%	127%	9%
1996*	-7%	16%	18%	4%	6%	16%	16%
1997*	2%	5%	7%	22%	8%	16%	7%
1998*	3%	6%	12%	18%	6%	14%	9%
1999*	9%	8%	14%	0%	10%	1.8%	10%
2000*	3%	-1%	5%	4%	6%	3.5%	2%
		Compou	and Annu	ıal Average		owth	14. 10400 10000 M. 140000 M. 4 M.
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1984-1991	20%	16%	15%	18%	15%	20%	16%
1991-1993	6%	1%	-12%	-4%	-8%	-13%	-5%
1994-2000	-3%	8%	10%	5%	27%	24%	9%



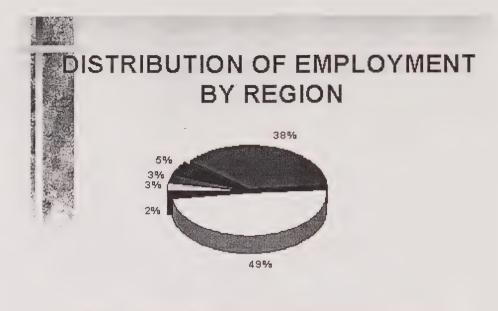


■Engineers □ Production Workers ■ Other Employment

	Em	ployment (Number	of Employees)	
Fiscal Year	Engineering	Production	Other	Total
1984	7893	24069	12079	44041
1985	8702	26982	13109	48794
1986	9890	30726	14016	54633
1987	10554	33656	14652	58861
1988	10876	34410	17574	62859
1989	11016	35881	19211	66107
1990	12081	36510	17088	65679
1991	12375	35895	17344	65615
1992	12016	33449	15851	61316
1993	11394	27868	14170	53431
1994	11716	28174	14141	54031
1995	12423	29034	15783	57239
1996*	12343	30360	16359	59061
1997*	12428	31199	16224	59850
1998*	12435	31225	15997	59657
1999*	12317	31089	15900	59306
2000*	12331	30896	16041	59268
3.11.11.11.11.11.11.11.11.11.11.11.11.11		Percentage of Er	nployees	
Fiscal Year	Engineering	Production	Other	Total
1984	18%	55%	27%	100%
1985	18%	55%	27%	100%
1986	18%	56%	26%	100%
1987	18%	57%	25%	100%
1988	17%	55%	28%	100%

1989	17%	54%	29%	100%
1990	18%	56%	26%	100%
1991	19%	55%	26%	100%
1992	20%	55%	26%	100%
1993	21%	52%	27%	100%
1994	22%	52%	26%	100%
1995	22%	51%	28%	100%
1996*	21%	51%	28%	100%
1997*	21%	52%	27%	100%
1998*	21%	52%	27%	100%
1999*	21%	52%	27%	100%
2000*	21%	52%	27%	100%
		Annual Growth	n Rates	
Fiscal Year	Engineering	Production	Other	Total
1985	10%	12%	9%	11%
1986	14%	14%	7%	12%
1987	7%	10%	5%	8%
1988	3%	2%	20%	7%
1989	1%	4%	9%	5%
1990	10%	2%	-11%	-1%
1991	2%	-2%	1%	0%
1992	-3%	-7%	-9%	-7%
1993	-5%	-17%	-11%	-13%
1994	3%	1%	0%	1%
1995	6%	3%	12%	6%
1996*	-1%	5%	4%	3%
1997*	1%	3%	-1%	1%
1998*	0%	0%	-1%	0%
1999*	-1%	0%	-1%	-1%
2000*	0%	-1%	1%	0%
Control of the contro	Compo	und Average Annu	ial Rate of Growth	
Fiscal Year	Engineering	Production	Other	Total
984-1991	7%	6%	5%	6%
991-1993	-4%	-12%	-10%	-10% _
1994-2000	1%	2%	2%	2%





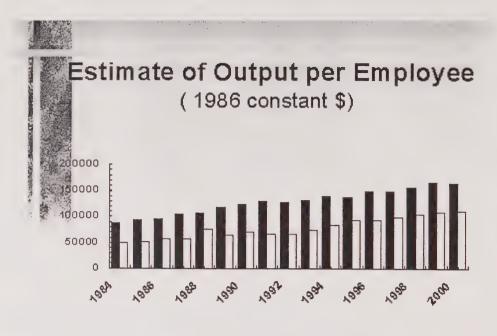
□BC ■Alta-Sask ■Manitoba ■Ontario □Quebec ■Atlantic

					of Employe		
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1984	999	18156	21119	2562	599	606	44041
1985	1250	19385	23930	2801	685	742	48794
1986	1822	21106	26619	3293	794	999	54633
1987	1718	23101	28481	3696	867	998	58861
1988	1888	25432	29363	3954	1049	1173	62859
1989	1794	27078	30878	4213	911	1233	66107
1990	1952	27937	28555	4743	1172	1320	65679
1991	1933	28194	28358	4177	1418	1535	65615
1992	2167	29182	23346	4293	1121	1206	61316
1993	1911	26281	19347	3500	1179	1214	53431
1994	1655	26411	20162	3562	1106	1135	54031
1995	1304	27986	21728	2805	1844	1572	57239
1996*	1264	28477	22925	2744	1873	1778	59061
1997*	1309	28110	23378	3018	1984	2051	59850
1998*	1335	27053	23808	3154	2060	2246	59657
1999*	1383	26220	23938	3392	2117	2257	59306
2000*	1411	26002	24020	3445	2128	2262	59268
000000000000000000000000000000000000000	J. Programme 1, 20 per 100 - 1, 2 pe	Perc	entage of	Total Empl	loyment		MATERIAL STATE OF THE PARTY OF
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1984	2%	41%	48%	6%	1%	1%	100%
1985	3%	40%	49%	6%	1%	2%	·100%
1986	3%	39%	49%	6%	1%	2%	100%
1987	3%	39%	48%	6%	1%	2%	100%
1988	3%	40%	47%	6%	2%	2%	100%

1989	3%	41%	47%	6%	1%	2%	100%
1990	3%	43%	43%	7%	2%	2%	100%
1991	3%	43%	43%	6%	2%	2%	100%
1992	4%	48%	38%	7%	2%	2%	100%
1993	4%	49%	36%	7%	2%	2%	100%
1994	3%	49%	37%	7%	2%	2%	100%
1995	2%	49%	38%	5%	3%	3%	100%
1996*	2%	48%	39%	5%	3%	3%	100%
1997*	2%	47%	39%	5%	3%	3%	100%
1998*	2%	45%	40%	5%	3%	4%	100%
1999*	2%	44%	40%	6%	4%	4%	100%
2000*	2%	44%	41%	6%	4%	4%	100%

			Annual (Growth Rate	es		
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1985	25%	7%	13%	9%	14%	22%	11%
1986	46%	9%	11%	18%	16%	35%	12%
1987	-6%	9%	7%	12%	9%	0%	8%
1988	10%	10%	3%	7%	21%	18%	7%
1989	-5%	6%	5%	7%	-13%	5%	5%
1990	9%	3%	-8%	13%	29%	7%	-1%
1991	-1%	1%	-1%	-12%	21%	16%	0%
1992	12%	4%	-18%	3%	-21%	-21%	-7%
1993	-12%	-10%	-17%	-18%	5%	1%	-13%
1994	-13%	0%	4%	2%	-6%	-7%	1%
1995	-21%	6%	8%	-21%	67%	39%	6%
1996*	-3%	2%	6%	-2%	2%	13%	3%
1997*	4%	-1%	2%	10%	6%	15%	1%
1998*	2%	-4%	2%	5%	4%	10%	0%
1999*	4%	-3%	1%	8%	3%	0%	-1%
2000*	2%	-1%	0%	2%	1%	0%	0%
<u></u>		Compoun	d Average	Annual Ra	ate of Grow	th	
Fiscal Year	Atlantic	Quebec	Ontario	Manitoba	Prairies	B.C.	Total
1984-1991	10%	6%	4%	7%	13%	14%	6%
1991-1993	-1%	-3%	-17%	-8%	-9%	-11%	-10%
1994-2000	-3%	0%	3%	-1%	12%	12%	2%
<u></u>		na. Se seus estrato, estratores estratores entre	Years with	* are Fored	cast		





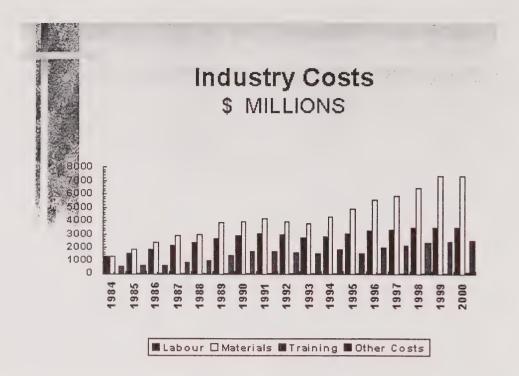
ı	Real Sales	Debba eulsVises

	Estimate of Output pe	er Employee
THE WAY OF THE PARTY PRINTS IN THE RESERVE	(1986 constar	nt \$)
Fiscal Year	Real Sales per Employee	Real value added per Employee
1984	87945	49462
1985	94448	51299
1986	95144	55955
1987	104851	56409
1988	107019	75446
1989	117893	64565
1990	123537	70714
1991	129841	66282
1992	127532	65457
1993	131586	74028
1994	138422	82358
1995	137231	94079
1996*	147709	92947
1997*	149356	98853
1998*	156572	103927
1999*	166367	109149
2000*	162923	110121

Annual Growth Rates				
Fiscal Year	Real Sales per Employee	Real value added per Employee		
1985	7%	4% .		
1986	1%	9%		
1987 -	10%	1%		
1988	2%	34%		

1989	10%	-14%
1990	5%	10%
1991	5%	-6%
1992	-2%	-1%
1993	3%	13%
1994	5%	11%
1995	-1%	14%
1996*	8%	-1%
1997*	1%	6%
1998*	5%	5%
1999*	6%	5%
2000*	-2%	1%
	Compound Annual Averag	e Rate of Growth
Fiscal Year	Real Sales per Employee	Real value added per Employee
1984-1991	6%	4%
1991-1993	1%	6%
1994-2000	3%	5%
An annihilation of the control of th		
	Years with * are F	orecast

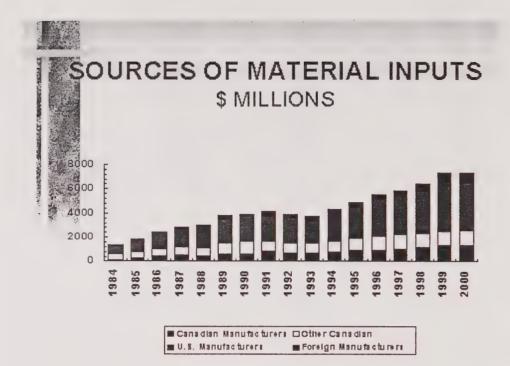




		Breakdown of Tota	al Costs (\$ Milli	ons)	THE RESERVE AND ADDRESS OF THE PARTY OF THE
Fiscal Year	Labour	Material Purchase	Training	Other	Total
1984	1291	1358	15	526	3190
1985	1501	1825	17	635	3978
1986	1787	2374	29	574	4764
1987	2127	2840	31	856	5854
1988	2347	2981	36	993	6357
1989	2634	3822	30	1371	7857
1990	2877	3920	45	1693	8534
1991	3037	4177	58	1669	8942
1992	2999	3939	68	1563	8570
1993	2733	3847	29	1551	8160
1994	2819	4300	32	1803	8955
1995	3032	4862	42	1556	9492
1996*	3205	5578	68	1989	10839
1997*	3328	5882	48	2087	11346
1998*	3435	6427	48	2332	12243
1999*	3447	7361	49	2407	13265
2000*	3467	7334	82	2500	13383
A 4000 E M E & F E E F AND 1 PM	TO AND A TO SERVICE STATE OF THE SERVICE STATE OF T	Percentage	of Total Costs	The second secon	***************************************
Fiscal Year	Labour	Material Purchase	Training	Other	Total
1984	40%	43%	0.5%	16%	100%
1985	38%	46%	0.4%	16%	100%
1986	38%	50%	0.6%	12%	100%
1987	36%	49%	0.5%	15%	100%
1988	37%	47%	0.6%	16%	100%

1989	34%	49%	0.4%	17%	100%
1990	34%	46%	0.5%	20%	100%
1991	34%	47%	0.6%	19%	100%
1992	35%	46%	0.8%	18%	100%
1993	33%	47%	0.4%	19%	100%
1994	31%	48%	0.4%	20%	100%
1995	32%	51%	0.4%	16%	100%
1996*	30%	51%	0.6%	18%	100%
1997*	29%	52%	0.4%	18%	100%
1998*	28%	52%	0.4%	19%	100%
1999*	26%	55%	0.4%	18%	100%
2000*	26%	55%	0.6%	19%	100%
		Annual Gr	owth Rates		
Fiscal Year	Labour	Material Purchase	Training	Other	Total
1985	16%	34%	13%	21%	25%
1986	19%	30%	71%	-10%	20%
1987	19%	20%	7%	49%	23%
1988	10%	5%	16%	16%	9%
1989	12%	28%	-17%	38%	24%
1990	9%	3%	50%	23%	9%
1991	6%	7%	29%	-1%	5%
1992	-1%	-6%	17%	-6%	-4%
1993	-9%	-2%	-57%	-1%	-5%
1994	3%	12%	10%	16%	10%
1995	8%	13%	31%	-14%	. 6%
1996*	6%	15%	62%	28%	14%
1997*	4%	5%	-29%	5%	5%
1998*	3%	9%	0%	12%	8%
1999*	0%	15%	2%	3%	8%
2000*	1%	0%	67%	4%	1%
www.	Cor	npound Annual A	verage Rate of	Growth	THE RESIDENCE OF THE COMMENTANCE OF THE PROPERTY OF THE PROPER
Fiscal Year	Labour	Material Purchase	Training	Other	Total
1984-1991	13%	17%	21%	18%	16%
1991-1993	-5%	-4%	-29%	-4%	-4%
1001 1000		9%	17%	6%	7%

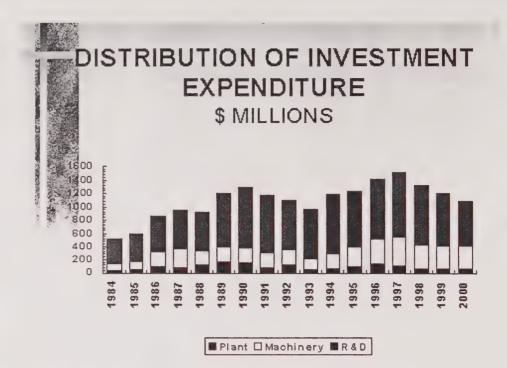




	Sources	of Material Inputs (\$	Millions)		
Fiscal Year	Canadian Aerospace & Defence Manufacturers	Other Canadian Companies	U.S.	Other Foreign	Total
1984	155	415	731	57	1358
1985	286	466	1012	61	1825
1986	430	595	1258	91	2374
1987	503	704	1503	131	2840
1988	437	663	1737	144	2981
1989	627	914	1975	306	3822
1990	654	940	2093	233	3920
1991	869	806	2082	420	4177
1992	672	808	2083	376	3939
1993	688	844	1836	478	3847
1994	750	883	2174	493	4300
1995	924	980	2553	405	4862
1996*	973	1094	3037	473	5578
1997*	1037	1200	3128	517	5882
1998*	1145	1170	3497	615	6427
1999*	1302	1239	4046	774	7361
2000*	1353	1264	3895	822	7334
CONTRACTOR AND ACCUSED AND ACC	SCO CONTINUE DE CO	Percentage of Total			
Fiscal Year	Canadian Aerospace & Defence Manufacturers	Other Canadian Companies	U.S.	Other Foreign	Total
1984	11%	31%	54%	4%	100%
1985	16%	26%	55%	3%	100%
1986	18%	25%	53%	4%	100%
1987	18%	25%	53%	5%	100%
1988	15%	22%	58%	5%	100%

1994-2000	10%	6%	10%	9%	***************************************	9%
1991-1993	-11%	2%	-6%	7%		-4%
1984-1991	28%	10%	16%	33%)	17%
Fiscal Year	Canadian Aerospace & Defence Manufacturers	Other Canadian Companies	U.S.	Other Fo	reign	Total
2000	***************************************	Annual Average Rat	li.			J 70
2000*	4%	2%	-4%	6%		3% 0%
1998	14%	6%	16%	26%		5%
1997**	10%	-3%	12%	19%	April Make	9%
1996* 1997*	5% 7%	12%	19%	17% 9%		5% 5%
1995	23%	11%	17%	-18%		3%
1994	9%	5%	18%	3%		2%
1993	2%	4%	-12%	27%		2%
1992	-23%	0%	0%	-10%		6%
1991	33%	-14%	-1%	80%		7%
1990	4%	3%	6%	-26%		3%
1989	43%	38%	14%	113%	28%	
1988	-13%	-6%	16%	10%	5%	
1987	17%	18%	19%	44%		0%
1986	50%	28%	26%	49%		0%
1985	85%	12%	38%	7%	THE PART AND ADDRESS OF THE PART OF THE PA	4%
Fiscal Year	Canadian Aerospace & Defence Manufacturers	Other Canadian Companies	U.S.	Other Foreign		otal
A STATE OF THE PROPERTY OF THE	A	nnual Growth Rate	S		***************************************	anno matta sy astro - ao a - c
2000*	18%	17%	53%	11%		100%
1999*	18%	17%	55%	11%		100%
1998*	18%	18%	54%	10%	***************************************	100%
1997*	18%	20%	53%	9%		100%
1996*	17%	20%	54%	8%	- Address	100%
1995	19%	20%	53%	8%		100%
1994	17%	21%	51%	11%		100%
1993	18%	22%	48%	12%		100%
1992	17%	21%	53%	10%		100%
1991	21%	19%	50%	10%		100%
1990	16%	26%	52% 53%	8% 6%		100%

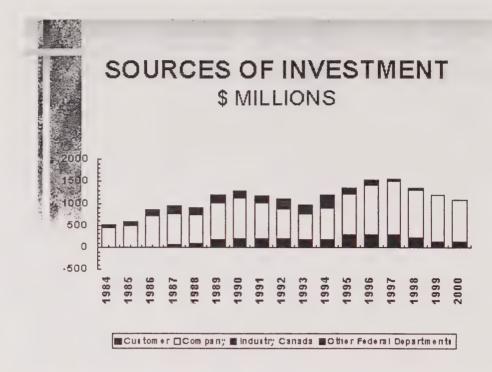




AN YEAR THE	Distribut	ion of Investment Exp	enditure (\$ Million	IS)
Fiscal Year	Plant	Machinery	R&D	Total
1984	31	110	373	514
1985	52	125	415	591
1986	93	238	530	861
1987	83	275	592	949
1988	120	218	575	912
1989	172	228	808	1208
1990	164	219	912	1295
1991	83	221	871	1175
1992	134	222	745	1102
1993	56	163	747	966
1994	72	217	896	1185
1995	95	291	831	1217
1996*	143	376	893	1411
1997*	112	425	969	1506
1998*	69	359	888	1315
1999*	64	349	780	1194
2000*	63	343	672	1078
The second secon		Percentage of Total	Expenditure	-
Fiscal Year	Plant	Machinery	R&D	Total
1984	6%	21%	73%	100%
1985	9%	21%	70%	100%
1986	11%	28%	62%	100%
1987	9%	29%	62%	100%
1988	13%	24%	63%	100%

1989	14%	19%	67%	100%
1990	13%	17%	70%	100%
1991	7%	19%	74%	100%
1992	12%	20%	68%	100%
1993	6%	17%	77%	100%
1994	6%	18%	76%	100%
1995	8%	24%	68%	100%
1996*	10%	27%	63%	100%
1997*	7%	28%	64%	100%
1998*	- 5%	27%	68%	100%
1999*	5%	29%	65%	100%
2000*	6%	32%	62%	100%
and the second s		Annual Growth	Rates	
Fiscal Year	Plant	Machinery	R&D	Total
1985	68%	14%	11%	15%
1986	79%	90%	28%	46%
1987	-11%	16%	12%	10%
1988	45%	-21%	-3%	-4%
1989	43%	5%	41%	32%
1990	-5%	-4%	13%	7%
1991	-49%	1%	-4%	-9%
1992	61%	0%	-14%	-6%
1993	-58%	-27%	0%	-12%
1994	29%	33%	20%	23%
1995	32%	34%	-7%	3%
1996*	51%	29%	7%	16%
1997*	-22%	13%	9%	7%
1998*	-38%	-16%	-8%	-13%
1999*	-7%	-3%	-12%	-9%
2000*	-2%	-2%	-14%	-10%
***************************************	Com	pound Annual Averag	e Rate of Growth	
Fiscal Year	Plant	Machinery	R&D	Total
1984-1991	15%	10%	13%	13%
1991-1993	-18%	-14%	-7%	-9%
1994-2000	-2%	8%	-5%	-2%

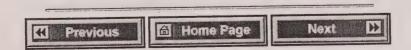


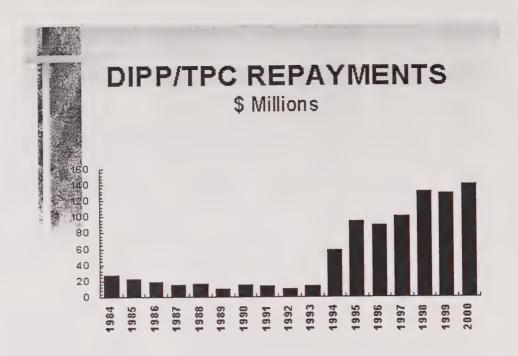


		Sources of In	vestment (\$ Millio	ns)	
Fiscal Year	Customers	Companies	Industry Canada	Other Departments	Total
1984	2	444	57	11	514
1985	2	504	81	4	591
1986	3	703	135	20	861
1987	75	680	157	37	949
1988	97	654	134	27	912
1989	183	838	169	18	1208
1990	208	913	164	10	1295
1991	205	810	148	12	1175
1992	192	675	222	13	1102
1993	187	587	185	7	966
1994	170	727	284	4	1185
1995	157	957	90	13	1217
1996*	147	1131	123	10	1411
1997*	160	1200	132	14	1506
1998*	128	1067	110	10	1315
1999*	120	1020	46	8	1194
2000*	123	967	-21	9	1078
Adaption 2. A printer and 2.5 (4) a description of a part of	***************************************	Percentage	of Total Investme	nt	A AMERICAN AND AND AND AND AND AND AND AND AND A
Fiscal Year	Customers	Companies	Industry Canada	Other Departments	Total
1984	0%	86%	11%	2%	100%
1985	0%	85%	14%	1%	·100%
1986	0%	82%	16%	2%	100%
1987	8%	72%	17%	4%	100%
1988	11%	72%	15%	3%	100%

1989	15%	69%	14%	1%	100%
1990	16%	71%	13%	1%	100%
1991	17%	69%	13%	1%	100%
1992	17%	61%	20%	1%	100%
1993	19%	61%	19%	1%	100%
1994	14%	61%	24%	0%	100%
1995	13%	79%	7%	1%	100%
1996*	10%	80%	9%	1%	100%
1997*	11%	80%	9%	1%	100%
1998*	10%	81%	8%	1%	100%
1999*	10%	85%	4%	1%	100%
2000*	11%	90%	-2%	1%	100%

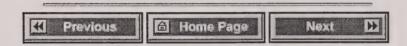
		Annual	Growth Rates		
Fiscal Year	Customers	Companies	Industry Canada	Other Departments	Total
1985	0%	14%	42%	-64%	15%
1986	50%	39%	67%	400%	46%
1987	2400%	-3%	16%	85%	10%
1988	29%	-4%	-15%	-27%	-4%
1989	89%	28%	26%	-33%	32%
1990	14%	9%	-3%	-44%	7%
1991	-1%	-11%	-10%	20%	-9%
1992	-6%	-17%	50%	8%	-6.2%
1993	-3%	-13%	-17%	-46%	-12%
1994	-9%	24%	54%	-43%	23%
1995	-8%	32%	-68%	225%	3%
1996*	-6%	18%	37%	-23%	16%
1997*	9%	6%	7%	40%	7%
1998*	-20%	-11.1%	-17%	NA	-13%
1999*	-6%	-4%	-58%	NA	-9%
2000*	3%	-5%	-146%	NA	-10%
manager of an one a such	Col	mpound Annu	al Average Rate of	Growth	
Fiscal Year	Customers	Companies	Industry Canada	Other Departments	Total
1984-1991	94%	9%	15%	1%	13%
1991-1993	-4%	-15%	12%	-24%	-9%
1994-2000	-5%	5%	NA	14%	-2%
		Years w	vith * are Forecast		





	nder DIPP/TPC (\$ Millions)
Fiscal Year	Repayments
1984	27
1985	22
1986	18
1987	14
1988	16
1989	10
1990	14
1991	13
1992	10
1993	13
1994	58
1995	98
1996*	94
1997*	105
1998*	138
1999*	134
2000*	147
Ann	ual Growth Rates
Fiscal Year	Repayments
1985	-19%
1986	-18%
1987	-22%
1988	14%
1989	-38%
1990	40%

1991	-7%		
1992	-23%		
1993	30%		
1994	346%		
1995	69%		
1996*	-4%		
1997*	12%		
1998*	31%		
1999*	-3%		
2000*	10%		
Compound Annual Average Rate of Growth			
Fiscal Year	Repayments		
1984-1991	-10%		
1991-1993	0%		
1994-2000	17%		
Years with * are Forecast			



ANNEX

ESTABLISHMENTS THAT PARTICIPATED IN 1996 SURVEY

ACRO Aerospace - A division of Canadian Helicopters Limited

Acton International Inc.

AlliedSignal Aerospace Canada (Montreal)

AlliedSignal Aerospace Canada (Toronto)

Andrew Canada Inc.

Arvin Ride Control Products

Atlantis Aerospace Corporation

ATS Aerospace Inc.

ATS Automation Tooling Systems Inc.

Bell Helicopter Textron

Boeing Canada Technology Ltd. (Amprior)

Boeing Canada Technology Ltd. (Winnipeg)

Bombardier Inc. Groupe Canadair

Bristol Aerospace Ltd.

CAE Electronics Ltd.

Canadian Marconi Company

Champion Road Machinery Ltd.

Chicopee Manufacturing Limited

Composites Atlantic Limited

Computing Devices Canada Ltd.

de Havilland Inc.

Derlan Aerospace Canada

Devtek Aerospace

DY 4 Systems Inc.

Eurocopter Canada Limited

FAG Bearings Ltd. (Aerospace Division)

Field Aviation Company Inc.

Fleet Industries

General Electric Canada Inc.

General Motors of Canada Limited - Diesel Division

Haley Industries Limited

Heroux Inc.

Hughes Elcan Optical Technologies

I.M.P. Aerospace Components Ltd.

I.M.P. Group Limited

Indal Technologies Inc.

Innotech Aviation Limited

Les Technologies Industrielles SNC Inc.

Linamar Corporation

Litton Systems Canada

Lockheed Martin Canada Inc.

MED-ENG Systems Inc.

Menasco Aerospace (Div. Of Coltec Aerospace Canada Ltd.)

Messier-Dowty Inc. (Montreal)

Messier-Dowty Inc. (Toronto)

McDonnell Douglas Canada Ltd.

Oerlikon Aerospace Inc.

Orenda Aerospace Corporation

Pratt & Whitney Canada Inc.

Prior Data Sciences Ltd.

Raytheon Canada Ltd.

Remtec Inc.

Robert Mitchell Inc.

Rolls-Royce Canada Limited
SED Systems Inc.
Spar Aerospace Limited
Standard Aero Limited
VAC AERO International Inc.
Walbar Canada Inc.

TOP 20: 1995

LEADING AEROSPACE AND DEFENCE COMPANIES

RANKED BY 1995 TOTAL SALES	1995
BOMBARDIER INC - CANADAIR LTD	1
PRATT & WHITNEY CANADA INC.	2
BELL HELICOPTER TEXTRON	3
CAE ELECTRONICS LTD.	4
DE HAVILLAND INC.	5
GENERAL MOTORS OF CANADA; DIESEL DIVISION	6
COMPUTING DEVICES CANADA LTD.	7
SPAR AEROSPACE LTD.	8
ROLLS-ROYCES CANADA LIMITED	9
MCDONNELL DOUGLAS CANADA LTD.	10
ALLIEDSIGNAL AEROSPACE CANADA	11
BOEING CANADA TECHNOLOGY LIMITED	12
LES TECHNOLOGIES INDUSTRIELLES SNC INC.	13
LITTON SYSTEMS CANADA LIMITED	14
GENERAL ELECTRIC CANADA INC	15
STANDARD AERO LTD.	16
CANADIAN MARCONI COMPANY	17
BRISTOL AEROSPACE LIMITED	18
MENASCO AEROSPACE	19
LOCKHEED MARTIN CANADA INC.	20

GUIDELINES AND GLOSSARY OF TERMS PROVIDED BY FIRMS PARTICIPATING IN THE AEROSPACE AND DEFENCE-RELATED INDUSTRIES SURVEY - 1995

Company Name The legal name of the company, and in the case of multi divisional companies, indicate the Division or Divisions/Subsidiaries to which the data relates.

Contact Person The person to be contacted in the event that clarification of data is required.

Currency Survey returns are reported in current dollars.

Sales Total sales of the Canadian Company or in the case of multi-divisional companies, the sales of the Division or subsidiary reporting. It should not include the sales of divisions or subsidiaries which are not involved in the Aerospace and Defence Industry, but should include sales by Aerospace and Defence oriented divisions in other industrial sectors.

1. Domestic Sales

Sales made to companies domiciled in Canada, where the products or services are delivered to a Canadian address including sales by a U.S. subsidiary to Canadian companies.

a) Sales to the Canadian Government

Sales to any Department or Agency of the Federal Government including Crown Corporations.

b) Sales to Canadian Aerospace and Defence Companies

This category covers sales to companies in the Canadian Aerospace and Defence-related sector which will incorporate the product into a higher assembly. The intention is to eliminate double counting of sales.

Example A - A machine shop manufacturing parts which are sold to a Canadian engine manufacturer would report these sales as "Sales to a Canadian Aerospace and Defence company".

If the engine manufacturer sells engines to a Canadian aircraft manufacturer these sales would be reported as "Sales to a Canadian Aerospace and Defence Company".

If, however, the engine manufacturer sells an engine to an aircraft operator such as an airline, the sale would be reported as "Sales to other Canadian customers".

c) Sales to other Canadian Customers

This category covers sales to Canadian customers who are not in the business of manufacturing and selling higher assemblies or products. It includes sales to aircraft operators, maintenance facilities and other non-manufacturing customers.

Total Domestic Sales

The sum of a), b), c) preceding.

2. Export Sales

This category covers all sales where the product or service is delivered to an address outside Canada, including sales by a Foreign Subsidiary of a Canadian company.

a) Sales to the United States Government

All sales to the United States Federal Government, its agencies, Departments, and Administrations.

b) Sales to U.S. Contractors

All sales to U.S. companies which incorporate the product into higher order assemblies.

c) Sales to other U.S. customers

All sales to U.S. companies not included in a) and b) preceding.

d) Sales to other foreign governments

All sales to federal governments, agencies, administrations, and crown corporations except Canada and the United States.

e) Sales to other foreign contractors

All sales to foreign companies (other than U.S.) where the product will be incorporated into higher order assemblies.

f) Sales to other foreign customers

All export sales other than a), b), c), d) and e) preceding.

Total Export Sales

The sum of a), b), c), d), e) and f) preceding.

3. Total Sales

The sum of total domestic sales and total export sales.

4. Military sales

Estimate: military/defence sales % of total sales

The estimated percentage of total sales which represent military and or security systems and components. This will include both domestic and export sales.

5. Personnel Costs

Wages, salaries, bonuses, and fringe benefits for all employees. Does not include Training Costs.

6. Materials and Supplies

a) Purchased from Canadian Aerospace and Defence companies

Includes Aerospace and Defence components, systems, and sub-systems manufactured to Aerospace and Defence standards by Canadian companies.

Does not include raw materials, commercial or industrial hardware or components.

b) Purchased from other Canadian Sources

All other materials and supplies purchased from Canadian companies.

c) Imported from U.S. Suppliers

Includes all material of U.S. origin whether procured directly from the supplier or through a Canadian agent.

d) Imported from other foreign sources

Includes all material not of Canadian or U.S. origin whether procured directly or through a Canadian agent.

7. Training Costs

The estimated cost of employee training whether carried out in house or in external institutions. Does not include that portion of training cost borne by Federal, Provincial, or other government agencies.

8. Other Costs and Expenditures

All other costs and expenses not defined above.

9. Investment

Total investment from all sources. Includes government contribution.

a) Plant

Acquisition or improvements to real property, acquisition, construction or improvements to buildings, and investment in services such as access to electricity, water etc. Includes construction and improvements to specialized test facilities such as test cells.

b) Machinery

Acquisition and replacement of machinery, tooling, and specialized equipment where it is the normal practice of the company to capitalize the costs. Includes laboratory equipment.

c) Research and Development

All research, design, and development. Does not include plant engineering, production engineering, or quality engineering.

Includes engineering research and development; materials and components; construction, test, and evaluation of prototypes; and such special equipment as may be required for such activities, including pre-production costs.

The percentage of R&D investment paid for by customers i.e. 3rd party revenues, to be quoted.

10. Government Support

All support in the form of grants and contributions from the Federal Government. Does not include R&D carried out under contract, but support from funded assistance programs such as DIPP, etc. is included. Repayment contributions are included.

a) Support from Industry Canada for Research and Development

Support for R&D under the R&D elements of the DIPP.

b) Support from Industry Canada for Source Establishment

Support from Industry Canada under the Source Establishment element of the DIPP.

c) Support from Industry Canada Capital Assistance

Contributions from Industry Canada for the acquisition of advanced production equipment to modernize or upgrade manufacturing capability.

d) Support from Industry Canada for Feasibility Studies

Contributions from Industry Canada under the feasibility study element of the DIPP.

e) Support from other Departments

5 of 10

Grants and Contributions from other Federal Government Departments, agencies, and or Crown Corporations.

f) Repayments

Repayments to the government of contributions which had been made under the DIPP.

11. Opening Inventory

Company owned inventory on hand at the beginning of the year.

12. Backlog of Orders

Firm orders on the books at year-end. Includes provisional orders (e.g., letter of intent) and excluded options to be confirmed at a later date.

13. Employment

Engineering/Scientific Employment

Engineers, scientists, and technicians involved in Design, Research, and Development. Does not include administrative, secretarial, or support staff.

Production Employment

All employees engaged in production functions, including, production engineering, quality engineering, material procurement and material handling. Excludes secretarial, administrative, and support staff.

Other Employment

All employees not covered in the preceding two groups.

14. Regional Dispersal

Breakdown (%) of corporate activity by region. The percentage breakdowns reported are used to estimate the regional distribution of sales and employment.

15. Breakdown of Sales by Sub-Sector

Airframe (Sub-sector)

All structural elements, accessories, components, systems and sub-systems which form part of an aircraft with the exception of avionics, propulsion and defence electronic systems.

Propulsion (Sub-sector)

All structural elements, components, accessories, systems and sub-systems which form part of the propulsion system of an aircraft.

Avionics (Sub-sector)

All electronics systems, sub-systems and components which are carried aboard an aircraft. Includes electrical power generation and conditioning systems. For the purpose of this survey, ground based

equipment for navigation and air traffic control, and aircraft simulators are considered to be part of the Avionics Sub-sector.

Excludes spacecraft electronics which for the purposes of this survey are considered to be part of the Space Sub-sector.

Space (Sub-sector)

All structural elements, components, accessories, systems and sub-systems which form part of a space vehicle or satellite, including its payload, propulsion system, imaging radar, and remote sensing equipment.

All elements of the launch complex and earth stations for command, control of, and communication with a space vehicle, including equipment for enhancement of remotely sensed images. Does not include earth station equipment for transmission and reception of commercial telecommunications or television signals.

Defence Electronics (Sub-Sector)

All electronics systems, sub-systems and components which have defence related capabilities.

All non-Aerospace and Defence products and services provided by companies which also produce products or services defined in one or more of the preceding sub-sectors.

16. Sales of Proprietary Parts and Systems

This covers parts and systems which your company manufactures to your own design or specification.

Sub-contract Sales

This covers parts which your company produces under subcontract to a design or specification controlled by others. It includes special services such as heat treatment, impregnation, surface coating, testing, and quality assurance activities carried out under sub-contract.

Agency Sales

This covers the sale and distribution of products **not** of your own manufacture.

Repair & Overhaul

This covers repair and overhaul activities carried out under contract. It does not include repair and overhaul activities carried out by airlines or aircraft operators for their own account.

Sales of Services

These include systems engineering, consultancy and customized maintenance systems, as distinct from the sale of manufactured products.

Spares

Estimate the percentage of total sales in each sub-sector which are sold as spare parts.

Notes:

- 1. Gross Sales (gross sales are the total sales for the sector).
- 2. Gross Output was estimated with the following formula:

Gross Output = (Total Sales + Ending Inventory) - Opening Inventory

Ending inventory for 2000 was estimated with the following formula:

(Opening Inventory 2000/Order Backlog 1999) * (Order Backlog 2000).

- 3. Net Sales for the sector are defined as Gross Sales minus sales to domestic Aerospace and Defence companies (i.e. sales to the sector by firms in the sector itself). Net Sales have traditionally been estimated in previous survey reports to present a sales figure, which in aggregate, avoids double counting of sales among domestic Aerospace and Defence companies.
- 4. Value Added is an economic concept which measures the value of the output generated by a sector, but avoids double counting the value created by other sector's that supply inputs to that particular sector.

Gross Output of the Aerospace and Defence industries Sector includes the Value Added produced within the sector itself, but it also includes the Value Added produced by other sectors on the inputs purchased by the Aerospace and Defence Sector.

The Value Added produced by the Aerospace and Defence sector is distributed to the factors of production in the form of income. For instance, the income generated by adding value in production is distributed to:

- labour in the form of wages, salaries, etc.;
 - the owners of capital in the form of:
- allowances for depreciation; interest payments to debt holders; profits to equity holders; and,
 - governments in the form of taxes, licence fees, etc.
- 5. The "Other" sub-sector consists mainly of "land and marine vehicles and equipment manufacturers", but it does not include the Canadian shipbuilders.
- 6. Sales data were deflated with Statistics Canada's Industry Selling Price Index for the Aircraft and Parts sector while the Value Added data were deflated with Statistics Canada's Implicit Price Index for GDP in the Aircraft and Parts Sector.

Statistics Canada's Price Indexes used to deflate Sales and Value Added per worker are shown below:

YEAR	INDUSTRY SELLING PRICE INDEX - AIRCRAFT AND PARTS	GDP DEFLATOR - AIRCRAFT AND PARTS SECTOR
1984	0.899	1.054
1985	0.963	1.141
1986	1.000	1.000
1987	1.002	1.049
1988	1.026	0.959
1989	1.056	1.085
1990	1.090	1.125
1991	1.126	1.163
1992	1.176	1.326
1993	1.235	1.278
1994	1.313	1.227
1995	1.379	1.213
1996*	1.432	1.240
1997*	1.491	1.267
1998*	1.550	1.295
1999*	1.611	1.323
2000*	1.675	1.352

^{*} Note: The indexes were projected over the forecast period by multiplying 1995 actual data with the average annual compound growth rate of growth in the index prevailing between 1984 and 1995. This is equivalent to assuming that inflation in the sector over the forecast period will be comparable to the rate prevailing prior to 1996. Since deflators for the defence sub-sector are not readily available, the Aircraft and Parts deflators were used. The latter do not accurately measure inflation in the defence sub-sector, but it is difficult to say whether they overestimate or underestimate inflation in the defence sub-sector. If anything Statistic Canada indexes for Aircraft and Parts generally increased faster prior to 1996 than its indexes for the "Other Electronics Sector" where some of the Avionics and Defence Electronics firms are located. In view of this, the indexes used may overstate inflation and thus tend to underestimate labour productivity, estimates.

Compound Annual Average Rate Of Growth (CAARG)

The (CAARG) is a useful measure for comparing two rates of growth in different time periods when the two time periods are of different length. Essentially it measures a rate of growth, which if compounded annually, would project the initial annual observation in a time series to the level of the last observation. The rate is an average in the sense that the same rate applies each year over the period in question. Alternatively one could compare a simple average rate of growth over two different periods, however, a simple average may over or understate the actual rates rate of growth if there are extreme values (i.e. unusually high or low values in the data).

To calculate the CAARG that would project the level of gross sales in 1984 to the level prevailing seven years later in 1991, use the following formula:

 $CAARG = \{ [(Gross Sales 1991/Gross Sales 1984) (1/7)] - 1 \}*100 \}$

The CAARG-calculated above may be compared with similar rates of growth estimated for the two year recessionary period 1991 to 1993, and the six-year 1994/2000 actual and forecast period. Such comparisons give some idea of the relative magnitude of the recession as well as the relative strength of the recovery compared with pre-recessionary rates of growth in the industry.

9 of 10 8/4/99 5:10 PM







